

Abrasion processes of Kuibyshev Reservoir as a factor of destruction of archaeological site Ostolopovo (Tatarstan, Russia)

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Abstract

Estimation of abrasion on the archaeological sites situated at the Kuibyshev Reservoir, one of the largest in the Volga-Kama cascade is highly important. The bank erosion is a real danger for the cultural heritage, and collection of the data on trends in exogenous geological processes is necessary. Every year the changing water level in the Kuibyshev reservoir causes erosion of around 800 archaeological sites. Remote sensing data (aerial photography and space digital images) were used, as well as topographic maps 1:50000 for abrasion intensity monitoring at archaeological site Ostolopovo. It makes possible to estimate abrasion intensity during recent 40-50 years, and to create a prognostic model of sites destruction. © 2014 AENSI Publisher All rights reserved.

Keywords

Abrasion, Archaeological sites, Geographic information systems, Kuibyshev reservoir, Remote sensing